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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,849

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Rupert Maier

MAIER-5

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NEW YORK, NY 10017

EXAMINER

TORRENTE, RICHARD T

ART UNIT

PAPER NUMBER

2482

NOTIFICATION DATE

DELIVERY MODE

12/01/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/598,849	Applicant(s) MAIER ET AL.	
	Examiner RICHARD TORRENTE	Art Unit 2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The Figure is objected because it should be designated by a legend such as -Fig. 1 - for proper identification. See MPEP § 608.02(g). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.
2. The Figure(s) is/are objected to as depicting a block diagram without "readily identifiable" directional flow of each block, as required by 37 CFR 1.84(n). Rule 84(n) requires "labeled representations" of graphical symbols, such as arrow heads; and any that are "not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable." In the case, the directional flow of the blocks to item 8 is not readily identifiable per se and therefore require the insertion of arrow heads identifying the flow of those blocks.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for Processing and Converting a Signal Unit.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 11-20 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory "process" under 35 U.S.C. 101 must

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

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(1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example, the “receiving the at least”, “determining an output signal”, etc. method are of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. The applicant has provided no explicit and deliberate definitions of “receiving the at least”, “determining an output signal”, etc. to limit the steps to the electronic form of the “a method for processing”.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim(s) 11-20 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 11 recites the limitation "the physical quantity" in line 8. There is insufficient antecedent basis for this limitation in the claim.

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8. Claim 15 recites the limitation "the aid of the formula" in line 2. There is insufficient antecedent basis for this limitation in the claim.

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim(s) 12-16 is/are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 12-16 disclosed "SI units" which is an abbreviation not defined in the specification.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 11-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Novak (NPL Conversion of Units of Measurement) (IDS).

Regarding claim 11, AAPA discloses a method for processing at least one signal representing a physical output quantity (signal) in an industrial installation (see ¶ [0002]), comprising the steps of: receiving the at least one signal representing the physical output quantity (see ¶ [0002]; e.g. temperature); determining an output signal representing a derived physical target quantity (e.g. temperature) from the at least one signal (see ¶ [0002]), said target quantity having a target unit (see ¶ [0003]).

Although AAPA discloses converting a unit of the physical quantity into the target unit of the target quantity (see ¶ [0004]), it is noted that AAPA does not disclose wherein the converting is automatically performed.

However, Novak, in the same field of endeavor, discloses a conversion system that automatically converting a unit of the physical quantity into the target unit of the target quantity (see abstract).

Given the teachings as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Novak teachings of automatic conversion into AAPA conversion for the benefit of eliminating the burdensome and error-prone input by a user, since the conversion factors used by the programmer might be entered incorrectly or might have limited accuracy.

Regarding claim 12, AAPA, now incorporating the teaching of Novak, further discloses wherein the converting step includes the step of considering a table in which conversion factors necessary for converting the unit of the at least one signal are deposited (see Novak page 653).

Regarding claim 13, AAPA, now incorporating the teaching of Novak, further discloses wherein the units in the table are broken down into basic SI units (see Novak section D, page 658).

Regarding claim 14, AAPA, now incorporating the teaching of Novak, further discloses wherein various units are arranged underneath one another in a column (see Novak fig. 5) and conversion parameters for breaking down a unit in the table into a basic SI units are listed column by column in rows (see Novak page 654).

Regarding claims 16 and 17, AAPA, now incorporating the teaching of Novak, further discloses comprising the steps of: including the unit of the physical quantity in a calculation formula (see Novak section IV, page 652), converting the unit of the physical quantity into a basic SI unit for determining the target quantity, and specifying the target quantity in a desired target unit (see Novak section VI, page 656).

Regarding claim 18, AAPA, now incorporating the teaching of Novak, further discloses comprising the step of automatically subjecting the calculation formula to a plausibility check using the target unit (see AAPA “unit checking” in abstract).

Regarding claim 19, AAPA, now incorporating the teaching of Novak, further discloses comprising the step of displaying (see AAPA ¶ [0004], although not shown, it is implied that some display is needed for the user to diagnose) the target quantity in accordance with a predetermined standard.

Regarding claim 20, AAPA, now incorporating the teaching of Novak, further discloses comprising the steps of detecting the at least one signal from an active operation in an industrial process using a mobile diagnostic and evaluating system (see AAPA ¶ [0004]), and generating the target quantity with the help of the system (see Novak fig. 5).

Allowable Subject Matter

13. Claim(s) 15 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
14. The following is an Examiner's statement of reasons for allowance: wherein the break-down into a basic SI unit is effected with the aid of the formula

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wherein x is the value of the physical

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quantity in the unit [E], y is the value of the physical quantity in a basic SI unit, f is the conversion factor, b is the base and e is the exponent of the base b with which the conversion factor is weighted, c is an offset constant, i is a running index and

$\prod [SI]^{e[SI]}$ is the product sum of basic SI units that are each weighted with a respective exponent e[SI] fails to anticipate or render the above underlined limitation obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

15. Claim 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD TORRENTE whose telephone number is (571) 270-3702. The examiner can normally be reached on M-F: 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Young Lee/
Primary Examiner, Art Unit 2482

/Richard Torrente/
Examiner, Art Unit 2482